Leafy spurge management for livestock production: A summary of techniques, tips, and integrated management tools that work

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Leafy spurge (Euphorbia esula L.) grows on a wide variety of terrain from flood plains to river banks, grasslands, ridges, and mountain slopes. It is primarily found in untitled habitats such as abandoned cropland, pastures, rangeland, woodland, roadsides, and waste areas. The plant grows in diverse environments from dry, to subhumid and from subtropic to sub-artic. It occurs on many topographic positions from the flat bottom of glacial lakes to the slopes of sand dunes and glacial moraines. After leafy spurge is introduced into an area, there does not seem to be any topographic limits to its invasion of new areas.

Livestock producers in four states were interviewed to determine the keys to their on-the-ranch management techniques for controlling and/or containing leafy spurge infestations. Key elements in common were found on most of these ranches. Unique individual management techniques were also identified on several of the ranches selected.

Common management techniques included mapping infestations, selecting the right herbicide for the areas to be treated, treating twice per year, rechecking and retreatment consistently, integrating with sheep grazing and cattle grazing management, cooperating with neighbors, working jointly through a planned program if available (Trust Fund grant), utilizing insects for long-term maintenance, persistence over time, and treating headwaters and top of drainages first.

Unique techniques included using Herbi sprayers to minimize water and herbicide volume and buying weed-free hay and forage to prevent reintroduction of weeds to clean pastures.

Progress reported varied from reductions of original infestation from 100% to 10% of original leafy spurge infestation to increasing animal unit months – (AUMs) from 25 AUMs to 40 AUMs. One rancher also reported the preservation of a Threatened and Endangered Species.